OBJECTIVES: Imatinib is considered standard of care for 1st line treatment of chronic myeloid leukemia (CML) in Brazil. Long-term treatment effectiveness, however, is jeopardized by questionable adherence among patients receiving imatinib. The goal of this study is to document the adherence of CML patients to imatinib, and the impact of these adherence patterns on long-term prognosis.

METHODS: A longitudinal cohort analysis was performed using SIA/DATASUS data from January 2008 through June 2010. Inclusion criteria included patients ≥ 18 years old, diagnosed with CML (ICD10: 92.1) in Chronic Phase; beginning 1st line treatment with imatinib from January 1, 2008 to December 31, 2008; and a minimum follow-up period of 6 months. Adherence of all patients that met inclusion criteria was calculated based on medication possession ratio (MPR) over a 15-month period. Patients were categorized as adherent (MPR ≥ 0.9) or non-adherent (MPR < 0.9). Using uni and multivariable logistic regression we analyzed the following covariates: adherence, age, gender, region of country and other comorbidities for their influence on progression rates. RESULTS: In total, 386 patients, 56% males and mean (SD) age 48 (15) years, were included in the study. There were 210 (54%) patients calculated as being adherent (MPR ≥ 0.9). At the end of the 24-months of follow-up, 20% patients from the non-adherent group had progressed, versus 10% in the adherent group (log-rank p = 0.02). Patients from North, South and Southeast regions of Brazil had significantly higher adherence as compared with those from Northeast or Center-west. According to the multivariable logistic regression, lower adherence is significantly associated with higher progression rates. CONCLUSIONS: Adherence to imatinib is associated with a better progression-free survival profile, with statistical significance being observed after a 24-months period. Non-adherence was observed in 46% of the population studied.